

Section 1. Registration Information

Source Identification

Facility Name:	Delaware River Plant
Parent Company #1 Name:	Polymer Additives Holdings Inc.
Parent Company #2 Name:	

Submission and Acceptance

Submission Type:	Re-submission
Subsequent RMP Submission Reason:	5-year update (40 CFR 68.190(b)(1))
Description:	
Receipt Date:	24-Sep-2020
Postmark Date:	24-Sep-2020
Next Due Date:	24-Sep-2025
Completeness Check Date:	24-Sep-2020
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	Yes

Facility Identification

EPA Facility Identifier:	1000 0001 7983
Other EPA Systems Facility ID:	NJR000035865
Facility Registry System ID:	

Dun and Bradstreet Numbers (DUNS)

Facility DUNS:	
Parent Company #1 DUNS:	
Parent Company #2 DUNS:	

Facility Location Address

Street 1:	170 Route 130 South
Street 2:	
City:	Bridgeport
State:	NEW JERSEY
ZIP:	08014
ZIP4:	0309
County:	GLOUCESTER

Facility Latitude and Longitude

Latitude (decimal):	39.792583
Longitude (decimal):	-075.395278
Lat/Long Method:	GPS Code Measurements (Psuedo Range) Standard Positioning Service Corrected
Lat/Long Description:	Process Unit
Horizontal Accuracy Measure:	3
Horizontal Reference Datum Name:	World Geodetic System of 1984

Source Map Scale Number:

Owner or Operator

Operator Name: Polymer Additives Inc.
Operator Phone: (856) 467-8216

Mailing Address

Operator Street 1: P.O. Box 309
Operator Street 2: 170 Route 130 South
Operator City: Bridgeport
Operator State: NEW JERSEY
Operator ZIP: 08014
Operator ZIP4: 0309
Operator Foreign State or Province:
Operator Foreign ZIP:
Operator Foreign Country:

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person: James R. Knighton
RMP Title of Person or Position: Plant Manager
RMP E-mail Address: robert.knighton@Valtris.com

Emergency Contact

Emergency Contact Name: Karen Anthony
Emergency Contact Title: ESH&S Manager
Emergency Contact Phone: (856) 467-8363
Emergency Contact 24-Hour Phone: (609) 206-6661
Emergency Contact Ext. or PIN:
Emergency Contact E-mail Address: karen.anthony@Valtris.com

Other Points of Contact

Facility or Parent Company E-mail Address:
Facility Public Contact Phone:
Facility or Parent Company WWW Homepage
Address:

Local Emergency Planning Committee

LEPC: Logan Twp LEPC

Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site: 61
FTE Claimed as CBI:

Covered By

OSHA PSM : Yes
EPCRA 302 : Yes

CAA Title V:	Yes
Air Operating Permit ID:	BOP200003

OSHA Ranking

OSHA Star or Merit Ranking:	Y
-----------------------------	---

Last Safety Inspection

Last Safety Inspection (By an External Agency) Date:	18-Aug-2020
Last Safety Inspection Performed By an External Agency:	Fire Department

Predictive Filing

Did this RMP involve predictive filing?:

Preparer Information

Preparer Name:
Preparer Phone:
Preparer Street 1:
Preparer Street 2:
Preparer City:
Preparer State:
Preparer ZIP:
Preparer ZIP4:
Preparer Foreign State:
Preparer Foreign Country:
Preparer Foreign ZIP:

Confidential Business Information (CBI)

CBI Claimed:
Substantiation Provided:
Unsanitized RMP Provided:

Reportable Accidents

Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.
-----------------------	---

Process Chemicals

Process ID:	1000111819
Description:	Benzyl Chloride
Process Chemical ID:	1000139788
Program Level:	Program Level 3 process
Chemical Name:	Chlorine
CAS Number:	7782-50-5
Quantity (lbs):	360000
CBI Claimed:	
Flammable/Toxic:	Toxic

Process ID:	1000111820
Description:	Phosphate Esters
Process Chemical ID:	1000139789
Program Level:	Program Level 3 process
Chemical Name:	Phosphorus oxychloride [Phosphoryl chloride]
CAS Number:	10025-87-3
Quantity (lbs):	220000
CBI Claimed:	
Flammable/Toxic:	Toxic

Process ID:	1000111821
Description:	Chlorine Tank Car Storage
Process Chemical ID:	1000139790
Program Level:	Program Level 3 process
Chemical Name:	Chlorine
CAS Number:	7782-50-5
Quantity (lbs):	2200000
CBI Claimed:	
Flammable/Toxic:	Toxic

Process NAICS

Process ID:	1000111819
Process NAICS ID:	1000113131
Program Level:	Program Level 3 process
NAICS Code:	325199
NAICS Description:	All Other Basic Organic Chemical Manufacturing

Process ID:	1000111820
Process NAICS ID:	1000113132
Program Level:	Program Level 3 process
NAICS Code:	325199
NAICS Description:	All Other Basic Organic Chemical Manufacturing

Process ID:	1000111821
Process NAICS ID:	1000113133
Program Level:	Program Level 3 process
NAICS Code:	325199
NAICS Description:	All Other Basic Organic Chemical Manufacturing

Section 2. Toxics: Worst Case

Toxic Worst ID: 1000090178

Percent Weight:	
Physical State:	Gas liquified by pressure
Model Used:	DEGADIS
Release Duration (mins):	10
Wind Speed (m/sec):	1.5
Atmospheric Stability Class:	F
Topography:	Urban

Passive Mitigation Considered

- Dikes:
- Enclosures:
- Berms:
- Drains:
- Sumps:
- Other Type:

Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000095934

Percent Weight:	
Physical State:	Gas
Model Used:	EPA's RMP*Comp(TM)
Wind Speed (m/sec):	3.0
Atmospheric Stability Class:	D
Topography:	Urban

Passive Mitigation Considered

- Dikes:
- Enclosures:
- Berms:
- Drains:
- Sumps:
- Other Type:

Active Mitigation Considered

Sprinkler System:	
Deluge System:	
Water Curtain:	
Neutralization:	
Excess Flow Valve:	Yes
Flares:	
Scrubbers:	
Emergency Shutdown:	Yes
Other Type:	

Toxic Alter ID: 1000095935

Percent Weight:	
Physical State:	Liquid
Model Used:	EPA's RMP*Comp(TM)
Wind Speed (m/sec):	3.0
Atmospheric Stability Class:	D
Topography:	Urban

Passive Mitigation Considered

- Dikes:
- Enclosures:
- Berms:
- Drains:
- Sumps:
- Other Type:

Active Mitigation Considered

- Sprinkler System:
- Deluge System:
- Water Curtain:
- Neutralization:
- Excess Flow Valve:
- Flares:
- Scrubbers:

Facility Name: Delaware River Plant

EPA Facility Identifier: 1000 0001 7983

Plan Sequence Number: 1000089926

Emergency Shutdown:

Yes

Other Type:

Section 4. Flammables: Worst Case

No records found.

Section 5. Flammables: Alternative Release

No records found.

Section 6. Accident History

No records found.

Section 7. Program Level 3

Description

Benzyl Chloride Process

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000119110
Chemical Name:	Chlorine
Flammable/Toxic:	Toxic
CAS Number:	7782-50-5
Process ID:	1000111819
Description:	Benzyl Chloride
Prevention Program Level 3 ID:	1000095387
NAICS Code:	325199

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	15-May-2020
---	-------------

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	26-Jan-2017
---	-------------

The Technique Used

What If:	
Checklist:	
What If/Checklist:	
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	06-Mar-2019

Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	
Runaway Reaction:	
Polymerization:	Yes
Overpressurization:	Yes
Corrosion:	Yes
Overfilling:	Yes
Contamination:	Yes
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	Yes

Earthquake:
Floods (Flood Plain):
Tornado:
Hurricanes:
Other Major Hazard Identified:

Process Controls in Use

Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	Yes
Flares:	
Manual Shutoffs:	Yes
Automatic Shutoffs:	Yes
Interlocks:	Yes
Alarms and Procedures:	Yes
Keyed Bypass:	Yes
Emergency Air Supply:	Yes
Emergency Power:	Yes
Backup Pump:	Yes
Grounding Equipment:	Yes
Inhibitor Addition:	Yes
Rupture Disks:	Yes
Excess Flow Device:	Yes
Quench System:	Yes
Purge System:	Yes
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	Yes
Dikes:	
Fire Walls:	
Blast Walls:	
Deluge System:	Yes
Water Curtain:	
Enclosure:	
Neutralization:	Yes
None:	
Other Mitigation System in Use:	Fire Monitors

Monitoring/Detection Systems in Use

Process Area Detectors:	Yes
Perimeter Monitors:	
None:	
Other Monitoring/Detection System in Use:	

Changes Since Last PHA Update

Reduction in Chemical Inventory:
Increase in Chemical Inventory:
Change Process Parameters:

Installation of Process Controls:
Installation of Process Detection Systems: Yes
Installation of Perimeter Monitoring Systems:
Installation of Mitigation Systems:
None Recommended:
None:
Other Changes Since Last PHA or PHA Update:

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): 01-Mar-2020

Training

Training Revision Date (The date of the most recent review or revision of training programs): 04-Dec-2019

The Type of Training Provided

Classroom: Yes
On the Job: Yes
Other Training: Computer Based Training

The Type of Competency Testing Used

Written Tests: Yes
Oral Tests: Yes
Demonstration: Yes
Observation: Yes
Other Type of Competency Testing Used:

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures): 01-Aug-2020

Equipment Inspection Date (The date of the most recent equipment inspection or test): 31-Aug-2020

Equipment Tested (Equipment most recently inspected or tested): Pump Pressure Switch

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures): 11-Mar-2020

Change Management Revision Date (The date of the most recent review or revision of management of change procedures): 31-Jul-2020

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review): 20-Dec-2018

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit): 15-May-2020

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit): 01-Mar-2021

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):
Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans): 30-Nov-2018

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures): 30-Nov-2018

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures): 31-Dec-2018

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance): 11-Sep-2020

Confidential Business Information

CBI Claimed:

Description

Phosphorous Oxychloride (Phosphoryl chloride)

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000119111
Chemical Name:	Phosphorus oxychloride [Phosphoryl chloride]
Flammable/Toxic:	Toxic
CAS Number:	10025-87-3

Process ID:	1000111820
Description:	Phosphate Esters
Prevention Program Level 3 ID:	1000095388
NAICS Code:	325199

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	15-May-2020
---	-------------

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	02-Feb-2018
---	-------------

The Technique Used

What If:	
Checklist:	
What If/Checklist:	
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	30-Dec-2020

Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	
Runaway Reaction:	Yes
Polymerization:	
Overpressurization:	Yes
Corrosion:	Yes
Overfilling:	Yes
Contamination:	Yes
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	Yes
Earthquake:	

Floods (Flood Plain):
Tornado:
Hurricanes:
Other Major Hazard Identified:

Process Controls in Use

Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	Yes
Flares:	
Manual Shutoffs:	Yes
Automatic Shutoffs:	Yes
Interlocks:	Yes
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	
Emergency Power:	Yes
Backup Pump:	Yes
Grounding Equipment:	Yes
Inhibitor Addition:	
Rupture Disks:	Yes
Excess Flow Device:	
Quench System:	
Purge System:	Yes
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	Yes
Dikes:	Yes
Fire Walls:	
Blast Walls:	
Deluge System:	Yes
Water Curtain:	
Enclosure:	Yes
Neutralization:	
None:	
Other Mitigation System in Use:	Emergency Scrubber, Layer Tank System, Foam, Fire Monitors

Monitoring/Detection Systems in Use

Process Area Detectors:	Yes
Perimeter Monitors:	
None:	
Other Monitoring/Detection System in Use:	

Changes Since Last PHA Update

Reduction in Chemical Inventory:
Increase in Chemical Inventory:
Change Process Parameters:

Installation of Process Controls:
Installation of Process Detection Systems:
Installation of Perimeter Monitoring Systems:
Installation of Mitigation Systems:
None Recommended:
None: Yes
Other Changes Since Last PHA or PHA Update:

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): 06-Apr-2020

Training

Training Revision Date (The date of the most recent review or revision of training programs): 17-Apr-2020

The Type of Training Provided

Classroom: Yes
On the Job: Yes
Other Training: Computer Based Training

The Type of Competency Testing Used

Written Tests: Yes
Oral Tests: Yes
Demonstration: Yes
Observation: Yes
Other Type of Competency Testing Used:

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures): 01-Aug-2020

Equipment Inspection Date (The date of the most recent equipment inspection or test): 10-Sep-2020

Equipment Tested (Equipment most recently inspected or tested): Rupture Disc

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures): 26-Mar-2020

Change Management Revision Date (The date of the most recent review or revision of management of change procedures): 31-Jul-2020

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review): 22-Aug-2019

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit): 15-May-2020

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit): 01-Mar-2021

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):
Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans): 30-Nov-2018

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures): 30-Nov-2018

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures): 31-Dec-2018

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance): 11-Sep-2020

Confidential Business Information

CBI Claimed:

Description

Chlorine Tank Car Storage

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000119112
Chemical Name:	Chlorine
Flammable/Toxic:	Toxic
CAS Number:	7782-50-5
Process ID:	1000111821
Description:	Chlorine Tank Car Storage
Prevention Program Level 3 ID:	1000095389
NAICS Code:	325199

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	15-May-2020
---	-------------

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	26-Jan-2017
---	-------------

The Technique Used

What If:	
Checklist:	
What If/Checklist:	
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	06-Mar-2019

Major Hazards Identified

Toxic Release:	Yes
Fire:	
Explosion:	
Runaway Reaction:	
Polymerization:	
Overpressurization:	Yes
Corrosion:	Yes
Overfilling:	
Contamination:	
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	
Earthquake:	

Floods (Flood Plain):
Tornado:
Hurricanes:
Other Major Hazard Identified:

Process Controls in Use

Vents:
Relief Valves: Yes
Check Valves:
Scrubbers:
Flares:
Manual Shutoffs: Yes
Automatic Shutoffs:
Interlocks:
Alarms and Procedures:
Keyed Bypass:
Emergency Air Supply:
Emergency Power:
Backup Pump:
Grounding Equipment:
Inhibitor Addition:
Rupture Disks:
Excess Flow Device: Yes
Quench System:
Purge System:
None:
Other Process Control in Use:

Mitigation Systems in Use

Sprinkler System:
Dikes:
Fire Walls:
Blast Walls:
Deluge System:
Water Curtain:
Enclosure:
Neutralization:
None: Yes
Other Mitigation System in Use:

Monitoring/Detection Systems in Use

Process Area Detectors:
Perimeter Monitors:
None: Yes
Other Monitoring/Detection System in Use:

Changes Since Last PHA Update

Reduction in Chemical Inventory:
Increase in Chemical Inventory:
Change Process Parameters:
Installation of Process Controls:

Installation of Process Detection Systems:
Installation of Perimeter Monitoring Systems:
Installation of Mitigation Systems:
None Recommended:
None: Yes
Other Changes Since Last PHA or PHA Update:

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): 01-Mar-2020

Training

Training Revision Date (The date of the most recent review or revision of training programs): 04-Dec-2019

The Type of Training Provided

Classroom: Yes
On the Job: Yes
Other Training: Computer Based Training

The Type of Competency Testing Used

Written Tests: Yes
Oral Tests: Yes
Demonstration: Yes
Observation: Yes
Other Type of Competency Testing Used:

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures): 01-Aug-2020

Equipment Inspection Date (The date of the most recent equipment inspection or test): 16-Sep-2020

Equipment Tested (Equipment most recently inspected or tested): chlorine car

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures): 11-Mar-2020

Change Management Revision Date (The date of the most recent review or revision of management of change procedures): 31-Jul-2020

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review): 20-Dec-2018

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit): 15-May-2020

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit): 01-Mar-2021

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans): 30-Nov-2018

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures): 30-Nov-2018

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures): 31-Dec-2018

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance): 11-Sep-2020

Confidential Business Information

CBI Claimed:

Section 8. Program Level 2

No records found.

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?): Yes

Facility Plan (Does facility have its own written emergency response plan?): Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?): Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?): Yes

Healthcare (Does facility's ER plan include information on emergency health care?): Yes

Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan): 30-Jun-2020

Emergency Response Training

Training Date (Date of most recent review or update of facility's employees): 15-Sep-2020

Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated): Logan Twp Office of Emergency Mgmt

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated): (856) 423-6500

Subject to

OSHA Regulations at 29 CFR 1910.38: Yes

OSHA Regulations at 29 CFR 1910.120: Yes

Clean Water Regulations at 40 CFR 112: Yes

RCRA Regulations at CFR 264, 265, and 279.52: Yes

OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254: Yes

State EPCRA Rules or Laws: Yes

Other (Specify): New Jersey Toxic Catastrophe Prevention Act

Executive Summary

ACCIDENTAL RELEASE PREVENTION AND EMERGENCY RESPONSE POLICIES

At the Delaware River Plant, we are committed to operating and maintaining all of our processes in a safe and responsible manner. We use a combination of accidental release prevention programs and emergency response planning programs to help ensure the safety of our employees and the public as well as protection of the environment. This document provides a brief overview of the comprehensive risk management activities that have been designed and implemented, including;

- A description of our facility and use of substances regulated by the Environmental Protection Agency's (EPA) Risk Management Plan (RMP) regulation.
- An overview of our accidental release prevention programs.
- A five-year history of accidental releases of chemicals regulated by EPA's RMP.
- An overview of our emergency response program.
- An overview of improvements at the facility to help prevent accidental chemical releases from occurring and adversely affecting our employees, the public and the environment.
- The certifications that EPA's RMP rule requires us to provide.
- The detailed information (called data elements) about our risk management program.

STATIONARY SOURCE AND REGULATED SUBSTANCES

The Delaware River Plant uses a variety of materials and processing operations to produce:

- Benzyl chloride, which is used as an intermediate to produce a variety of end-products, including plasticizers, perfumes, biocides and flavorings.
- Plasticizers, which are used to produce vinyl flooring, wire coating, caulk and other soft vinyl end products.
- Dibutyl phenyl phosphate (DBPP) and tri-isobutyl phosphate (TiBP) which are used to make hydraulic fluids for use in aviation control systems.
- Muriatic Acid is 32% Hydrochloric Acid. It is produced as a by-product in both the Benzyl Chloride and Phosphate Esters departments. It is used on site for neutralization and is sold as a product. The anhydrous hydrochloric acid is produced at less than 5,000 pounds per hour in the Benzyl Chloride Process and less than 3,000 pounds per hour in the Phosphate Esters Process. The gas is absorbed into solution with water and is not stored in the anhydrous state. There is typically not more than 150 pounds of anhydrous hydrochloric acid in the piping leading to the absorbers. Therefore, the EPA RMP threshold of having more than 5,000 pounds of anhydrous hydrochloric acid on site instantaneously is not met. The NJ Toxic Catastrophe Prevention Act anhydrous hydrochloric acid threshold of 2,000 pounds of anhydrous hydrochloric acid generated within one hour is met.

Our plant operates 24 hours, (7) days a week, year-round, except for planned or unplanned downtime for maintenance or inventory control. Our plant has operated safely since its initial startup in 1961 without a major incident affecting our community.

In our processes we use the following chemicals that EPA has identified as having the potential to cause significant offsite consequences in the event of a substantial accidental release. Our accidental release prevention programs and our contingency planning efforts help us effectively manage the hazards that are posed to our employees, the public and the environment by our use of these chemicals.

Toxics:

Our facility uses two RMP-regulated chemicals, and one additional NJTCPA regulated chemical is produced as a by-product. Chlorine and phosphorous oxychloride are used to produce our products. Hydrochloric acid gas is a byproduct.

Chlorine, which is purchased, is used at our site to produce benzyl chloride and is stored in and distributed from railroad tank cars. Chlorine is a gas at normal pressure and temperature, but is stored as a liquid under pressure in the tank cars. It is unloaded directly from the tank car into a steam-heated vaporizer, where it is heated to vaporize the liquid chlorine for use.

Phosphorus Oxychloride is purchased and used at our site to produce Phosphate Esters Plasticizers. Phosphorus Oxychloride is stored as a liquid in a storage tank and pumped as a liquid to the process.

Flammables:

We have no RMP-regulated flammables stored or handled at our facility.

GENERAL ACCIDENTAL RELEASE PREVENTION PROGRAM AND CHEMICAL-SPECIFIC PREVENTION STEPS

We take a systematic, proactive approach to preventing accidental releases of hazardous chemicals. Our management systems address each of the key features of successful prevention programs, including those incorporated into EPA, OSHA and New Jersey Toxic Catastrophe Prevention Act requirements:

- Inventory Control to minimize the quantity that could be released in an accident.
- Process Safety Information to ensure up-to-date parameters for safely operating the process.
- Process Hazards Analysis to identify and correct potential safety problems.
- Standard Operating Procedures which describe how to safely operate the process.
- Training to ensure that operators and mechanics are qualified to safely perform their job.
- Mechanical Integrity/Preventive Maintenance to inspect and test equipment to ensure mechanical integrity and minimize equipment failure.
- Management of Change to identify and address potential safety concerns associated with process modification prior to installation.
- Pre-Startup Safety Review to ensure that process modifications are safe prior to start-up.
- Annual Compliance Audits to verify that procedures are being followed and to institute corrective actions if necessary.
- Incident investigations to identify and address the root causes of incidents or near-misses to prevent recurrence.
- Employee Participation in all process safety management activities.
- Hot Work Permit to ensure that work involving flame, sparks or heat producing equipment is controlled to minimize the chance of a fire.
- Contractor Safety Program to ensure that safe companies are hired to work in the plant, and to make sure that contract employees are aware of potential hazards and safety procedures and are trained to safely perform their job. A permit system is also in place to control contractor work and help ensure that it is done safely.
- Risk Assessment to estimate and reduce the likelihood and impact of potential accident scenarios.

- Breaking Into Process Permit Procedure to ensure that proper precautions are taken when opening process equipment to prevent release of hazardous chemicals.
- Comprehensive security program to deter, detect, and delay an intruder onto our site so that we can respond promptly to any threat

As part of our prevention efforts, we have implemented chemical-specific prevention steps:

- The benzyl chloride processes are monitored, alarmed, and interlocked to shut down if a problem occurs using computer control systems.
- Atmospheric chlorine sensors are in place to quickly detect a leak in the unloading area if it occurs.
- Vents and relief devices are connected to scrubbers, where the chlorine is neutralized with caustic soda.
- Periodic thickness checks are made on vessels and process piping to make sure that internal or external corrosion are not taking place which could result in equipment failure.
- Special corrosion-resistant Monel hoses are used to connect tank cars to the process and the hoses are replaced every 6 months.
- A specially designed tank car-mounted valve and excess-flow valve are used to allow the car to be shut off remotely if a leak occurs in the unloading line.
- Both American Petroleum Institute (API) and plant standards are used to ensure proper design, installation, operation and maintenance of chlorine systems.
- A special capping kit is available to seal any leaks in the tank car unloading fittings

The risk of phosphorus oxychloride releases is minimized by a number of features:

- The Phosphate Esters process is monitored, alarmed and interlocked to shut down if a problem occurs by a computer control system.
 - Atmospheric sensors are installed to quickly detect a leak if one occurs.
 - Phosphorus oxychloride is unloaded and stored in an enclosed building vented to a scrubber to contain leaks and resulting vapors.
 - Special spill blanketing systems are provided in case of a spill which would minimize the formation of hazardous vapors.
 - Both API and plant standards are used to minimize the potential for a release, including design, installation, operation and maintenance of phosphorus oxychloride handling systems.
- The risk of hydrogen chloride releases is minimized primarily through use of corrosion-resistant piping and vent scrubbing equipment. Atmospheric HCl sensors are installed to quickly detect a leak if one occurs.

These individual elements of our prevention program work together to prevent accidental chemical releases. Our company and our employees are committed to the standard that these management systems set for the way we do business and have specific accountabilities and controls to ensure that we are meeting our own high standards for accident prevention.

FIVE-YEAR ACCIDENT HISTORY (Status as of the 2020 submission)

We keep records for all significant accidental chemical releases that occur at our facility.

There have been no accidental chemical releases of materials covered under EPA's RMP rule during the past five years.

EMERGENCY RESPONSE PROGRAM

The Delaware River Plant maintains a comprehensive emergency response plan, which consolidates all of the various federal, state and local regulatory requirements for emergency response planning. Our program provides the essential planning and training for effectively protecting workers, the public, and the environment during emergency situations. Furthermore, we coordinate our plan with the community emergency response plan.

Features of our emergency response plan include the following:

- Atmospheric monitors to provide prompt detection of leaks.
- A plant alarm system to notify everyone of an incident.
- Department-specific emergency procedures which address potential incidents.
- Remote shutdown capability to permit quick process isolation and shutdown.
- A Dispersion Modeling System to assess potential for off-site impact of a release.
- Emergency generators to provide backup electrical power to critical equipment in the event of a power failure.
- Fire Protection systems for all process areas handling flammable materials as well as 1 million gallons of fire water storage and primary and backup fire pumps.
- An Emergency Team trained to respond to fires.
- Emergency Response Training of all employees, on at least an annual basis, in their emergency responsibilities.
- Emergency Drills at least annually with outside responders to test performance of the Emergency Response Plan.

CHANGES TO IMPROVE SAFETY

RECENT CHANGES